CHAPTER 1: PURPOSE OF AND NEED FOR ACTION



INTRODUCTION

This Final Environmental Impact Statement (FEIS) has been prepared to assist the public and the National Park Service (NPS) in the development of a Fire Management Plan (FMP) for Point Reyes National Seashore (PRNS). The FEIS has been prepared in accordance with the 1969 National Environmental Policy Act (NEPA), which requires federal agencies to evaluate the potential impacts of their actions on the environment. As required by NEPA, the FEIS analyzes several alternatives that could meet the park's objectives for fire management and presents a comparison of the probable impacts of implementing the alternatives.

The planning area for the Fire Management Plan (FMP) includes NPS lands located approximately 40 miles northwest of San Francisco in Marin County, California (Figures 1 and 2). These lands include the 70,046-acre Point Reyes National Seashore (PRNS or the Seashore), which is comprised primarily of beaches, coastal headlands, extensive freshwater and estuarine wetlands, marine terraces, and forests; as well as 18,000 acres of the Northern District of Golden Gate National Recreation Area (GGNRA), which primarily support annual grassland, coastal scrub, and Douglas-fir and coast redwood forests. Under a joint working agreement with GGNRA, the Seashore performs day-to-day management of these nearby GGNRA lands, as well as participating in some planning.

Point Reyes National Seashore was created on September 13, 1962 to "save and preserve for purposes of public recreation, benefit, and inspiration, a portion of the diminishing seashore of the United States that remains undeveloped (Public Law 87-657)." The park is a coastal sanctuary with an exceptionally diverse variety of habitat types - roughly 20% of California's plant species and 45% of North America's bird species have been recorded within its boundaries. The Seashore contains numerous sites indicating Native American occupancy, as well as cultural resources from early periods of European settlement. To preserve the historic ranching legacy of the area, approximately 30 ranches and dairies within Seashore boundaries are under permit agreements with the federal government.

Golden Gate National Recreation Area was created in 1972 "to preserve for public use and enjoyment certain areas...possessing outstanding natural, historic, scenic, and recreational values, and ... to provide for the maintenance of needed recreational open space necessary to urban environment and planning." In the management of the recreation area, the NPS shall "preserve the recreation area, as far as possible, in its natural setting, and protect it from development and uses which would destroy the scenic beauty and natural character of the area"(16 USC §460bb).

Purpose of the Fire Management Plan

The purpose of the Fire Management Plan is to provide a framework for all fire management activities for the Seashore and the North District of GGNRA, including suppression of unplanned ignitions, prescribed fire, and mechanical fuels treatments. It is intended to guide the fire management program for approximately the next 10-15 years. The plan would include concise program objectives, details on staffing and equipment, and comprehensive information, guidelines, and protocols relating to the management of unplanned wildfire, prescribed burning, and mechanical fuels treatment.

Need for the Fire Management Plan

Fire management is an essential component of NPS operations in PRNS and the Northern District lands of GGNRA. The need for a well-planned and effective fire management program is threefold. First, the project area's ecosystems have evolved through time with periodic fire, both natural and human-ignited, and many components of these systems require the continuation of periodic fire. As is typical of many national parks and other federal lands, however, active and effective fire suppression efforts for the past 150 years have dramatically changed native ecosystems. Ecosystem changes from the lack of fire include forest and shrub encroachment on grasslands, decadence and death of fire-adapted species, and extremely dense forests.

Second, fire suppression has also resulted in a dangerous accumulation of flammable or hazardous fuels - large quantities of dead and downed trees and branches that have accumulated in overly dense forests and shrublands. Because of these high fuel loads, residences and businesses adjacent to the Seashore and GGNRA are at risk from catastrophic wildfire or a smaller fire spreading from adjacent parklands. Also, a structural fire close to the park could spread into federal lands and develop into a wildland fire that damages park resources.

Third, the park's existing Fire Management Plan (NPS, 1993) needs to be updated. Since the current FMP 1993 was published, the national fire policies have been updated and new guidelines have been issued to park units. In addition, the NPS has conducted fire research and now has a better understanding of the role of fire in ecosystem preservation, resulting in a greater capability of the PRNS to effectively conduct an effective fire program.

This updated Plan recognizes that a more concerted effort is needed to effectively reduce fire risk along the wildland/urban interface, to reduce hazardous fuels, and to reestablish fire in park ecosystems where it is safe to do so.

Fire Management Plan Goals

The following goals have been developed for the updated Fire Management Plan for PRNS and the Northern District lands of GGNRA. These goals were generated from internal staff meetings and public external scoping meetings and presentations, from review of NPS Policies, Directors Orders, and other fire-related guidance documents listed below.

Goal 1: Protect firefighters and the public.

- Goal 2: Protect private and public property.
- Goal 3: Maintain or improve conditions of natural resources and protect these resources from adverse impacts of wildland fire and fire management practices.
- Goal 4: Maximize efforts to protect cultural resources from adverse effects of wildland fire and fire management practices.
- Goal 5: Foster and maintain effective community and interagency fire management partnerships.
- Goal 6: Foster a high degree of understanding of fire and fuels management among park employees, neighbors, and visitors.
- Goal 7: Improve knowledge and understanding of fire through research and monitoring and continue to refine fire management practices.

Legislative and Policy Constraints and other Considerations used in Developing the Fire Management Plan

The NPS is constrained from taking any actions that might go against relevant laws, regulations, or policies. These include enabling legislation for the NPS, the PRNS, and the GGNRA, NPS Management Policies (revised in 2000), Director's Orders 12 (regulations for implementing the National Environmental Policy Act), Director's Order 18 (regulations for Fire Management Programs), and the PRNS and GGNRA General Management Plan, Resource Management Plan, and other guidance from PRNS planning and policy documents. Other constraints also exist, such as funding limits, staff time, permit availability, resource impacts, burn window, etc. These are briefly explained below.

National Park Service Legislation

Act of August 25, 1916 (National Park Service Organic Act, PL 64-235, 16 USC §1 et seq. As amended). On August 15, 1916, Congress created the National Park Service with the National Park Service Organic Act. This act, as reaffirmed and amended in 1970 and 1978, establishes a broad framework of policy for the administration of national parks:

"The Service thus established shall promote and regulate the use of the Federal areas known as National Parks, Monuments, and Reservations... by such means and measures as to conform to the fundamental purpose of the said Parks, Monuments, and Reservations, which purpose is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations."

Specific Park Legislation

Congress established Point Reyes National Seashore on September 13, 1962 "to save and preserve, for purposes of public recreation, benefit and inspiration, a portion of the diminishing seashore of the United States that remains undeveloped (Public Law 87-657)." An amendment to Public Law 94-544 (passed in 1976) states that the Seashore is to be administered without impairment of its natural values.

Congress established Golden Gate National Recreation Area by Public Law 92-589 "in order to preserve for public use and enjoyment certain areas of Marin and San Francisco Counties,

California (San Mateo County added by P.L. #96-607)." In addition to providing for recreation and educational opportunities consistent with sound principles of land use planning and management, the NPS was also instructed to "preserve the recreation area, as far as possible, in its natural setting, and protect it from development and uses which would destroy the scenic beauty and natural character of the area."

Wilderness Act (16 USC 1133)

All actions undertaken in the wilderness, including suppression of wildfires and other aspects of fire management, must conform to the "minimum requirement" concept, and be conducted in such a way as to protect natural and cultural resources (NPS, 2000, 6.3.9). The minimum requirement concept is a two-step documented process that determines:

1. whether the action is appropriate or necessary to administer the area as wilderness and does not pose a significant impact to wilderness resources and character, and 2. which techniques or types of equipment are needed to ensure minimum impact to wilderness resources and character (NPS, 2000, Sec. 6.3.5).

Endangered Species Act of 1973, as amended (PL 93-205, 87 Stat. 884, 16 USC §1531 et seq.)

The Endangered Species Act protects threatened and endangered species, as listed by the U.S. Fish and Wildlife Service, from unauthorized take, and directs federal agencies to ensure that their actions do not jeopardize the continued existence of such species. Section 7 of the act defines federal agency responsibilities for consultation with the U.S. Fish and Wildlife Service and requires preparation of a Biological Assessment to identify any threatened or endangered species that is likely to be affected by the proposed action. The National Park Service initiated and maintains informal consultation with the U.S. Fish and Wildlife Service regarding this FEIS.

Wildland Fire Management Policy

The NPS has made fire and fuels management a very high priority national issue. In 2001 the Interagency Federal Wildland Fire Policy Review Working Group revised the Federal Wildland Fire Management Policy, which applies to all federal land management agencies. The key element of the policy is that firefighter and public safety is the first priority. In addition, the policy states that fire, as a critical natural process, will be integrated into land and resource management plans and activities on a landscape scale, and across agency boundaries. The policy also directs that fire management plans and programs will be based on a foundation of sound science. Research will support ongoing efforts to increase our scientific knowledge of biological, physical, and sociological factors.

The National Park Service Management Policies

NPS Management Policies (NPS, 2000) is the basic Service-wide policy document of the NPS. These policies provide guidance in the development of an updated Fire Management Plan. The following elements related to fire management are important considerations.

Each park with vegetation capable of burning will prepare a fire management plan and will address the need for adequate funding and staffing to support its fire management program. The plan will be designed to guide a program that responds to the park's natural and cultural resource

objectives; provides for safety considerations for park visitors, employees, neighbors, and developed facilities; and addresses potential impacts to public and private property adjacent to the park.

Parks will use methods of wildland fire suppression that not only minimize impacts of both the suppression action and of the fire; but also are commensurate with the goals of maintaining effective control, working to ensure firefighter and public safety, and protecting valuable resources.

Technical or Logistic Constraints

The approximate weather window for prescribed burns at Point Reyes is from June to November. Burning can begin in the Olema Valley after annual grasses have cured, which does not normally occur until mid-June to early July. While the burn window in the Olema Valley is generally the most flexible in the Seashore, burns must be timed to fall between the dissipation of the coastal fog and the onset of afternoon sea breezes.

During the summer months coastal fog normally keeps fuels moist on Inverness Ridge and to the west. Burning on Inverness Ridge and in coastal areas can be extremely difficult. This is because there is a narrow burning window from late September to early October when fuels dry out. East wind events during this same time frame can result in Red-Flag Days on which no burning is allowed.

Smoke can have local impacts on residents of West Marin and can impair road visibility. All burns meeting resource management objectives must be submitted to the Bay Area Air Quality Management District (BAAQMD) for a permit. Often, "burn days" do not coincide with weather conditions appropriate for burning in PRNS.

Constraints Imposed by Risk

PRNS is one of three NPS units in this region that has been identified as having a wildland/urban interface at risk from a potential fire on NPS land. There are four communities bordering the Seashore that meet the criteria for communities at risk from wildfire. The NPS Management Policies (NPS, 2000, Sec. 4.5) indicate park units must comprehensively consider firefighter and public safety and costs as well as resource values in deciding appropriate strategic and technical options for managing wildland fires. Because of the existing neighboring urban areas and the potential for wide-spread risk to public safety or property, and because, as noted above, vegetation in the project area tends to grow quickly and burn hot and fast, wildland fire has been excluded as a tool. In other words, all natural or accidental ignitions would be suppressed.

Any time a prescribed burn is executed on Seashore administered lands, there is always a risk to the residents and property of adjacent communities. The high financial and emotional cost of the loss of residential structures is a major concern. PRNS is committed to managing prescribed burns to minimize any risk to private land. The risk of such an escape is always a major factor when making the final decision as to whether to conduct a controlled burn or use mechanical

methods to reduce fuels. If controlled burning in the interface and along roads is conducted, it must proceed at a slower pace than in other areas to minimize smoke production.

Because of high values at risk in the interface and smoke concerns, PRNS has adopted a general policy of not allowing fires to burn freely within a perimeter through the night. This requires that all burn perimeters be secure by the end of each day. Burn units must therefore be kept small and larger units must be subdivided into segments that can be burned in one day. This precludes any strategy of large-scale landscape fire restoration at PRNS. Smaller units generally take more time for fewer acres and drive up the cost per acre.

Constraints Imposed by Park Resources or Values

Point Reyes has significant populations of threatened and endangered plant and animal species, and other unique wildlife. These biota can and do affect the time, location and layout of fire management activities. For example, a buffer zone around spotted owl nests is required for a burn to take place and burning is restricted in habitat occupied by mountain beaver. Riparian areas are also avoided and not burned because they provide needed bank vegetation for Coho salmon and steelhead trout, which are federally listed as threatened

Avoiding these sensitive resources can result in burn units that are not optimally laid out for operational defensibility. This means more firefighters are required and that slower, more precise fires result in fewer acres burned.

Staffing Constraints

The NPS has instituted new guidelines for prescribed burning (NPS Reference Manual 18, Chapter 10), which, among other changes, require that all NPS prescribed burns have "contingency resources" (such as fire trucks on stand-by) committed and assigned to every burn. These contingency resources must be available based on the prediction of a worst-case scenario. This is further complicated by the fact that the fire season peaks around the nation in the summer months, and resources that are normally used for conducting prescribed burns may be needed in another location for emergency fire suppression

Relationship to Other Plans

General Management Plan

The General Management Plan/Environmental Analysis, Golden Gate National Recreation Area and Point Reyes National Seashore (NPS, 1980) recognized the need to incorporate prescribed burning into research programs designed to enhance ecosystem management in the park. The Plan states: "Although the majority of the seashore is generally viewed as a wild area where natural processes are allowed to predominate, manipulation of those processes through methods such as selective thinning, burning and mowing will be cautiously pursued when necessary to protect its scenic, ecological and recreational values (NPS, 1980)."

Point Reyes National Seashore Strategic Plan

The PRNS Strategic Plan states that by 2003, the application of fire as a natural environmental variable will be incorporated to the fullest extent practicable in resource management and that fire management personnel will attempt to reduce fuels by 25% in strategic areas adjacent to the Seashore's wildland urban interface boundary and within fire management units.

Resources Management Plan

The Resources Management Plan for PRNS (NPS, 1999b) describes goals, objectives and implementation strategies for documentation and long-term protection of cultural and natural resources. Research objectives within the plan regarding fire call for determining the following:

- Fire history of the Seashore
- Effects of fire on abiotic and biotic resources
- Methods for controlling non-native plants using prescribed fire
- Methods for restoring native grasslands using prescribed fire
- Relationship to Plans, Projects, and Activities of Other Agencies

Mount Tamalpais Area Vegetation Management Plan - Marin Municipal Water District (MMWD)

This plan, prepared in 1995, presents strategies for managing vegetation on over 19,000 acres owned by MMWD and an adjacent 1,150 acres owned by Marin County Open Space District (MCOSD). The plan provides specific recommendations for reducing fire hazards and enhancing biodiversity. The plan did not provide specific recommendations regarding the interface between MMWD and GGNRA North District on Bolinas Ridge. However, at this interface, the plan recommends the NPS continue its fuel reduction operations along the top of Bolinas Ridge. This information would be used to guide the development of the updated Fire Management Plan.

Marin County's Fire Plan

The Marin County's Fire Plan: A Wildland Fire Risk Assessment Model (2000) provides a prescription for reducing costs and losses from wildland fire. The plan uses a four-factor assessment that defines Marin County's wildland fire risk and hazards. The plan also addresses generalized wildland fire risk for federal parklands. This information has been be used to guide PRNS in developing strategic fire management units and fire treatments in this Fire Management Plan.

California Fire Plan

In 1996 the California State Board of Forestry and the California Department of Forestry (CDF) and Fire Protection prepared the California Fire Plan (CDF, 1996). The overall goal of the plan is to reduce total costs and losses from wildland fire in California by protecting assets at risk through focused pre-fire management prescriptions and increased initial attack success. Key elements of the plan are the development of wildfire safety zones and cooperation with stakeholders, including federal agencies. General strategies from the plan will be used as the updated Fire Management Plan is developed and implemented.

Marin Countywide Plan

The Environmental Hazards Element of the Marin Countywide Plan (Marin Community Development Agency, 1994) discusses fire hazards and wildfires. Adopted polices encourage fuel breaks, brush clearance, and reduction of hazardous fuels. The Fire Management Plan would incorporate these and other strategies for reduction of fire hazard. In addition, PRNS and the GGNRA North District are part of the Marin County Coastal Recreation Corridor. The Countywide Plan recommends that PRNS and GGNRA be retained in their natural state to the greatest extent possible, and that recreation uses be low intensity. This recommendation is in accordance with the basic principals that guide all NPS planning efforts.

Issues and Concerns Raised During Scoping

During a series of scoping meetings, the NPS requested input from the public, from federal, state, and local agencies, and from park resource specialists on fire management concerns, the types of issues that should be addressed in the FEIS, and the range of fire management alternative strategies that should be considered.

On January 27, 2000, a "Notice of Scoping for Fire Management Plan at Point Reyes National Seashore" was published in the Federal Register. On January 29, 2000, at a public meeting of the Point Reyes National Seashore Citizen Advisory Commission, a presentation was given announcing the scoping period for the plan. Scoping comments were solicited from January 27, 2000 to March 28, 2000.

In addition to the Federal Register Notice, the scoping period was publicized through a mass mailing to the public that included background information on the FMP and a notice of a scoping workshop held March 9, 2000. The workshop was also advertised through notices posted in the communities surrounding the park and a notice in the local weekly newspaper, the Point Reyes Light. The two-hour March 9 public scoping workshop was attended by five citizens.

On February 14, 2000 and on February 22, 2000, internal scoping sessions were conducted to identify staff issues and concerns. These meetings were attended by an interdisciplinary group of resource and fire specialists from the PRNS and GGNRA staff.

On March 28, 2000, a two-hour scoping session was held for local fire agencies. In addition to representatives of the NPS Fire Management Office, members of the Marin County Fire Department, Inverness Volunteer Fire Department, California State Parks, and Marin Municipal Water District were in attendance. Also invited, but not attending, were the Marin County Open Space District, Bolinas Fire Protection District, Nicasio Volunteer Fire Department, and Stinson Beach Fire Department.

The issues and concerns identified during scoping and from earlier public comments fell into 14 main areas, ranging from air and water quality to biological and cultural resources, visitor experience, and human health and safety. These issues and concerns provided the basis for the selection of the "impact topics" that will be addressed in the environmental consequences section of this FEIS. They are discussed briefly below.

Soils

Wildland fire suppression activities, prescribed burns, and fuel reduction by mechanical means could remove vegetation from the soil surface, resulting in loss of topsoil to erosion. In areas that burn with high intensity, soils can become hydrophobic (i.e., water repellant), and suffer a decrease in soil productivity by destroying soil microorganisms or by volatilizing stored nitrogen and other essential nutrients.

Air Resources

PRNS is a Class I air quality area under the federal Clean Air Act. Class I areas carry the most stringent standards for pollution concentrations. Wildland fire releases pollutants that contribute to a degradation of local air quality and could contribute to a long-term decline of air basin air quality. Extremely small particles, less than 10 microns in size, can be generated by burning and ground-disturbing activities. These particles have been associated with health problems.

Hydrology, Water Resources, and Water Quality

Fuel reduction actions such as prescribed burning or brush clearing remove vegetation and disturb soils. This disturbance can result in soil erosion, increased sedimentation in nearby water bodies, and increased water turbidity. The use of off-road vehicles during wildland fire suppression can alter surface drainage patterns. Deposits of sediments can also increase the occurrence or severity of localized flooding and cause changes in surface hydrology.

Vegetation

Vegetation within the project area could be subject either to adverse or beneficial effects as a result of fire management activities. For example, pile burning of downed vegetation, poorly executed prescribed burns, and catastrophic wildland fires can create very hot, severe conditions that kill above ground biomass, as well as seeds in the soil, which can alter revegetation and successional patterns. During wildland fire suppression, the construction of control lines and firebreaks, the creation of access roads, and other activities such as "mopping up" can destroy or damage native vegetation. Fuel reduction methods such as scraping, mowing, or brush cutting, which are designed to eliminate non-native vegetation or to thin dense vegetation, can also destroy or damage native plant species. Both fires and mechanical treatments can increase the potential for invasion or spread of non-native plant species, many of which successfully outcompete native vegetation as the cleared area is revegetated. Alternatively, wildland or prescribed fire can benefit some plants and plant communities by creating a mosaic of successional states that will support greater species richness. Some species in the project area may be highly dependent on fire for their long-term reproductive success (e.g., Bishop pine, Marin manzanita).

Wetlands

Wetlands are lands that are transitional between terrestrial and aquatic systems, where the water table is usually at or near the surface or the land is covered by shallow water. Perennial and seasonal wetlands burn only occasionally in late summer and fall under dry conditions. Wetlands could be affected by fire suppression activities such as fire line creation, mowing, or the use of heavy vehicles in soft soils. High fire intensity could alter wetland soils, vegetation, or hydrology. Extremely hot fires, for example, can kill large areas of vegetation and allow nonnative species to vegetate the area.

Wildlife

The project area supports an exceptional diversity of wildlife species, which could either benefit from or be harmed by fire management activities. Wildlife could be killed or harmed by wildland fire, prescribed burns, or mechanical treatments such as mowing. Species could be affected by changes in vegetation structure or composition resulting from fire or mechanical treatments. For example, some species are dependent on moist habitats and would be displaced if the canopy layer were removed. Fire and mechanical removal of fuels, however, usually results in greater habitat heterogeneity (i.e., a mosaic of different habitat types) that can increase or maintain wildlife species richness.

Special-Status Species

The project area is home to numerous plant and wildlife species that are globally, nationally, regionally, or locally rare. Examples of federally listed species in the project area are the northern spotted owl, coho salmon, steelhead trout, Myrtle's silverspot butterfly, Point Reyes mountain beaver, California red-legged frog, and Sonoma spineflower.

Fire management activities have the potential to affect many of these species. For example, coho salmon and steelhead trout could be affected by increased sedimentation in creeks and/or persistent turbidity following wildland or prescribed fire. Conversely, as is the case for common plants and wildlife, many special-status species in the project area are adapted to periodic fire, and application of fire to the ecosystems could benefit these species by providing a wider diversity of habitats, by stimulating seed germination, or by improving habitat for prey species.

Cultural Resources

Fire management activities, including fire suppression or fuels treatments, could result in impacts to prehistoric and historic cultural resources in the park. A hot wildfire could damage historic or prehistoric surface material. Conversely, a prescribed burn could enhance a culturally significant landscape by perpetuating an important historic scene. The project area contains important archeological and historically significant sites, as well as cultural landscapes that could experience impacts from these actions.

Visitor Experience

Fire management activities may affect visitor experience by requiring trail closures, or by causing changes to the physical environment and aesthetics of the park setting. PRNS includes the 33,373 acre Phillip Burton Wilderness Area that was Congressionally authorized n 1976. This designated wilderness area preserves a critical remnant of undeveloped California coast. Fire suppression actions and fire management projects may temporarily affect the wilderness qualities protected in this area, such as isolation, opportunities for solitude, and natural quiet. In the long-term, fuel reduction actions and prescribed burns have the potential to change both the visual appearance and the viewsheds of the park.

NPS Management and Operations

Each of the proposed alternatives may affect park staff and budgets differently, and budgetary constraints could reduce the ability of the park to implement each objective. The FEIS addresses the impacts of each fire management alternative on park operations in terms of staffing,

implementation costs and equipment, and requirements for maintaining effective fuel reduction zones.

Human Health and Safety

Fire management and fire suppression actions can affect the health and safety of firefighters, local residents, and visitors. Weather conditions during prescribed fires could change unexpectedly, resulting in an unanticipated shift in the smoke plume or in an uncontrolled wildfire that could put people or property at risk. Alternatively, reduction of hazardous accumulations of fuels around developed areas through mechanical treatments or prescribed burning will reduce the risk of catastrophic fire, thus having beneficial effects on human health and safety.

Regional Economy (Socioeconomic Issues)

Fire management projects involving prescribed burning or mechanical treatments that impede the use of the park by visitors through short-term road and trail closures could result in a loss of revenue to local businesses which rely on tourism.

Issues Dismissed from Further Consideration

Floodplains

All federal agencies are required to consider the effects of federal actions on floodplains (Executive Order 11988 – Floodplain Management). This Executive Order, however, pertains to the occupancy or modification of floodplains, and to development within floodplains, neither of which would result from implementation of the proposed Fire Management Plan.

Prime and Unique Farmlands

To ensure compliance with the Farmland Protection Policy Act (FPPA; PL 97-98; 7 U.S.C. 4201 et seq.), the Council on Environmental Quality (CEQ) requires consideration of impacts to prime and unique farmland as a result of federal actions. Prime and unique farmlands are defined by the U.S. Department of Agriculture (USDA) and are determined by the USDA Natural Resources Conservation Service (NRCS). Within the project area, Giacomini Ranch is classified as prime or unique. However, because of high year-round moisture levels and low intensity burning fuels in this area, none of the proposed alternatives includes management actions for Giacomini Ranch. Therefore, this issue is not included as an impact topic discussed in the FEIS.

Sacred Sites and Indian Trust Resources

As stated in NPS Management Policies (NPS, 2000), the NPS acknowledges that American Indian tribes treat specific places containing certain natural and cultural resources as sacred places having established religious meaning, and as locales of private ceremonial activities. Fire management activities in the proposed Fire Management Plan would not have any impacts on sacred sites. In addition, there are no Indian Trust resources in PRNS.

Selection of Impact Topics

Selection of topics to be addressed in the FEIS was based on concerns raised during internal and public scoping, and on regulatory and NPS policy requirements. These issues involve significant

resources that could be beneficially or adversely affected by project implementation. Impact topics include the following:

- Air Quality
- Water Resources and Water Quality
- Soils
- Vegetation
- Wetlands
- Wildlife
- Special Status Species (e.g., Threatened, Endangered, Rare and Sensitive Species)
- Cultural Resources
- Human Health and Safety
- Visitor Experience and Visual Quality
- NPS Management and Operations
- Regional Economy (Socioeconomic Issues)